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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,901	12/27/2001	George Cintra	08935-249001 /M-4965	1584

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EXAMINER	
ALEJANDRO, RAYMOND	
ART UNIT	**PAPER NUMBER**
1745	

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/034,901	CINTRA ET AL.	
	Examiner	Art Unit	
	Raymond Alejandro	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 August 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-15 and 46-62* is/are pending in the application.

4a) Of the above claim(s) *5-8,12 and 13* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,4,9-11,14,15 and 46-62* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 March 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

This office communication is in response to the amendment filed on 08/24/05. The applicant has not yet overcome the 35 USC 103 rejections. Refer to the abovementioned amendment for substance of applicant's rebuttal arguments. However, the present claims (including newly added claims 46-62) are finally rejected over the same art and newly found art as set forth hereinbelow and for the reasons of record:

Election/Restrictions and Claims Disposition

1. This application contains claims 5-8 and 12-13 drawn to an invention nonelected with traverse in Paper No. 08/20/03. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 47-49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 47 is indefinite as it depends from nonexistent claim 26. Fur purpose of prosecution, claim 47 has not been further treated on the merits.

5. Claims 48-49 are indefinite as they both depend from claim 47 which further depends from nonexistent claim 26. Fur purpose of prosecution, claims 48-49 have not been further treated on the merits as well.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 3-4, 9-11 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson 6402796 in view of Fukumura et al 5834052.

The instant application is directed to a method of making a battery electrode wherein the disclosed inventive concept comprises forming a cathode layer and removing the substrate. Other limitations include the cathode mixture; the substrate material; the current collector; the binder and the continuous process.

As to claim 1:

Johnson discloses a method of producing a battery wherein the method commences with a substrate 11 upon which the layers of battery components are built upon; the substrate is then remove and replaced with a cathode current collector (Abstract/Col 3, lines 24-45). Johnson teaches that a cathode made of a lithium intercalation compound or lithium metal oxide LiM_xO_y where M is a metal and O denotes oxygen such as $LiCoO_2$ $LiMgO_2$ or $LiNiO_2$ or $LiFeO_2$ (COL 2, lines 9-15). *Thus, Johnson refers to mixed metal oxides which are compounds formally derived from an individual metal oxides but contain two or more metal species often in arbitrary ratio.*

Johnson discloses and claims the following (COL 1, lines 43-47/ CLAIMS 1 and 8):

> In a preferred form of the invention a method of producing a method of producing a thin film battery cell comprises the steps of providing a supporting substrate, depositing a cathode upon the substrate, depositing an electrolyte upon the cathode, and removing the substrate from the cathode.

> 1. A method of producing a portion of a thin film battery cell comprising the steps of:
> (a) providing a supporting substrate;
> (b) depositing a cathode upon the substrate;
> (c) depositing an electrolyte upon the cathode; and
> (d) removing the substrate from the cathode.

> 8. A method of producing a portion of a thin film battery cell comprising the steps of:
> (a) providing a substrate made of a sputterable material;
> (b) depositing a cathode upon the substrate; and
> (c) sputtering the substrate so as to substantially remove the substrate from the cathode.

Examiner's note: *the instant claims fail to further specify whether the term "cathode mixture" stands for a physical mixture wherein the substances are mixed but not chemically combined and may be separated mechanically. Consequently, the present claim language has been construed as encompassing either: i) a physical mixture, or ii) a cathode mixture*

comprising any mixed metal oxides representing compounds which are formally derived from individual slurry metal oxides but contain two or more metal species often in arbitrary ratio, are chemical reaction products generally formed by heating mixture of appropriate oxides and are not physical mixtures but are true examples of chemical mixtures i.e. chemical compounds of arbitrary ratio.

As to claims 3-4:

Johnson disclose that the substrate can be either a metal or polymeric material (COL 3, lines 24-25/COL 5, lines 25-28):

compounds. It should also be understood that other materials may be utilized for the web substrate such as nickel, copper, nickel-copper compounds, other metals and some polymers, such as polyethylene. Furthermore, it should also be under-

As to claims 9-10:

It is disclosed that as the web continues about the aligning drum 62 the web passes below the cathode current collector mask 68 and adjacent the cathode current collector sputtering device, so that the cathode current collector device 67 deposits a very thin cathode current collector 18 thereon (COL 4, lines 54-62). It is further discloses that the web may be wound upon the aligning drum 62 in such a manner so that complete battery cells are stacked in alignment one upon the other (COL 4, lines 63-67). *Thus, the layers are stacked one upon another, at least, under certain degree of pressure.*

As to claim 11:

It is disclosed that the a protective coating may then be deposited upon the current collector to allow later stacking of the battery (COL 4, lines 35-39). *Thus, the protective coating assists to bind together the stackable components.*

As to claims 14-15:

Johnson teaches that the process of depositing cathode materials continues until substantially the entire substrate web is coated (COL 3, lines 43-46). Johnson further discloses that the process is continuously carried out (COL 3, lines 46 to COL 4, lines 62). *Thus, the steps of forming the layer and removing the substrate are continuous.*

Johnson discloses a method of producing an electrode battery as discussed above. However, the preceding prior art fails to expressly teach the cathode mixture slurry.

Fukumura et al disclose a method for producing an electrode sheet having a multilayer structure (TITLE/ABSTRACT) wherein two or more layers for an electrode sheet are simultaneously coated with a coating solution (ABSTRACT). Particularly, Fukumura et al disclose using a slurry of a coating solution (COL 6, lines 39-41/ EXAMPLE 1/ COL 8, lines 38-40).

In view of the above, it would have been obvious to one skilled in the art at the time the invention was made to use the cathode mixture slurry of Fukumura et al in the method of Johnson as Fukumura et al teach that such coating solution slurry also serves as a protective layer. Thus, the cathode material in the form of a slurry acts as a protective feature too. *In this case, it is noted that the two references (i.e. Fukumura et al and Johnson) are significantly relevant to each other as they both resolve the same problem of making/producing a layered electrode structure; and as such, they are also pertinent to field of applicant's endeavor regardless of the specific manufacturing technique.*

9. Claims 1, 3-4, 9-11 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukumura et al 5834052 in view Johnson 6402796.

As to claim 1:

Fukumura et al disclose a method for producing an electrode sheet having a multilayer structure (TITLE/ABSTRACT) wherein two or more layers for an electrode sheet are simultaneously coated with a coating solution (ABSTRACT). Particularly, Fukumura et al disclose using a slurry of a coating solution (COL 6, lines 39-41/ EXAMPLE 1/ COL 8, lines 38-40). In the EXAMPLES of the POSITIVE ELECTRODE 1, it is shown the use a slurry of a coating solution for a positive electrode (COL 6, lines 33-65); and such a coating solution is to be coated on a base material sheet (*the substrate*) (COL 3, lines 25-33).

Concerning claims 3-4:

Fukumura et al disclose the use of base material sheets made of metals, non-conductive polymer film, and paper (COL 3, lines 55-67).

With reference to claims 9-10:

Fukumura et al disclose coating the coating solution on the base material (COL 3, lines 25-34) wherein the base material is a current collector (COL 3, lines 55-60). *Thus, Fukumura et al envisions contacting the cathode material layer with a current collector. Moreover, absent further specific pressure magnitude, it is thus contended that such current collector coating is carried out under certain pressure.*

Regarding claim 11:

Fukumura et al disclose the use of a coating layer containing carbon on the polymer film, and/or a paper to provide an electric conductive property (COL 3, line 64 to COL 4, line 5).

Thus, Fukumura et al at once envisage using additional constituents for electrically conducting purposes.

On the matter of claims 14-15:

Fukumura et al reveals that their method for producing the electrode having a multilayer structure is carried out continuously (COL 3, lines 5-13).

Fukumura et al disclose the method for producing the electrode as discussed above. However, the preceding prior art does not expressly disclose the specific substrate removing step.

Johnson discloses a method of producing a battery wherein the method commences with a substrate 11 upon which the layers of battery components are built upon; the substrate is then removed and replaced with a cathode current collector (Abstract/Col 3, lines 24-45). Johnson discloses and claims the following (COL 1, lines 43-47/ CLAIMS 1 and 8):

> In a preferred form of the invention a method of producing a method of producing a thin film battery cell comprises the steps of providing a supporting substrate, depositing a cathode upon the substrate, depositing an electrolyte upon the cathode, and removing the substrate from the cathode.

> 1. A method of producing a portion of a thin film battery cell comprising the steps of:
> (a) providing a supporting substrate;
> (b) depositing a cathode upon the substrate;
> (c) depositing an electrolyte upon the cathode; and
> (d) removing the substrate from the cathode.

> 8. A method of producing a portion of a thin film battery cell comprising the steps of:
> (a) providing a substrate made of a sputterable material;
> (b) depositing a cathode upon the substrate; and
> (c) sputtering the substrate so as to substantially remove the substrate from the cathode.

In light of these disclosures, it would have been obvious to one skilled in the art at the time the invention was made to perform the specific substrate removing step of Johnson in the

method of Fukumura et al as Johnson teaches that such substrate removing step allows to make batteries with a greater volume of active material and minimal volume of inactive material in order to achieve a high volumetric power density. Accordingly, the substrate which contains inactive material itself and support other batteries component during manufacturing process can be constructively removed to increase utilization of active material, thereby volumetric power density is greatly increased due to the mere removal of the substrate. *In this case, it is noted that the two references (i.e. Fukumura et al and Johnson) are significantly relevant to each other as they both resolve the same problem of making/producing a layered electrode structure; and as such, they are also pertinent to field of applicant's endeavor regardless of the specific manufacturing technique.*

10. Claims 46 and 50-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over: a) Johnson 6402796 in view of Fukumura et al 5834052 and/or b) Fukumura et al 5834052 in view Johnson 6402796 as applied to claims 1 above, and further in view of Hamamoto et al 2002/0168576.

Johnson-Fukumura et al and/or Fukumura et al-Johnson et al are applied, argued and incorporated herein for the reasons above. However, the preceding references do not expressly disclose the specific cathode mixture components.

As to claims 46 and 50-62:

Hamamoto et al disclose that cathode can be prepared by mixing the cathode active material with a conducting agent, a binder such as polyvinylidene fluoride (PVDF), polytetrafluoroethylene (PTFE), and N-methylpyrrolidone solvent to form a cathode paste which

is coated on a collector (*the substrate*) (SECTION 0043, 0044, 0062). **EXAMPLE 1** exemplifies mixing such specific electrode components to form the cathode paste (EXAMPLE 1).

[0043] The cathode can be prepared by mixing the cathode active material with a conductive agent such as acetylene black or carbon black, a binder such as polyvinylidene fluoride (PVDF), polytetrafluoroethylene (PTFE), and N-methylpyrrolidone solvent to form a cathode paste, then coating this cathode paste on a collector such as aluminum foil or a stainless steel lath, drying at 50 to 250° C., followed by compression molding.

[0062] 80% by weight of $LiCoO_2$ (cathode active material), 10% by weight of acetylene black (conductive agent), and 10% by weight of polyvinylidene fluoride (binder) were mixed and diluted by N-methylpyrrolidone to prepare a cathode paste. The paste was coated on an aluminum foil

In view of the above, it would have been obvious to one skilled in the art at the time the invention was made to employ the specific cathode mixture components of Hamamoto et al to make the battery electrode of Johnson-Fukumura et al and/or Fukumura et al-Johnson et al because Hamamoto et al teach that battery cathodes can be prepared by mixing together the cathode active material, conducting aids, solvents and binders. Accordingly, such specific cathode mixture materials are suitable battery electrode components helping to provide a non-aqueous electrolyte battery having satisfactory electric capacity and superior cycle characteristics and storage characteristics.

11. Claims 52-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson 6402796 in view of Hamamoto et al 2002/0168576.

As to claim 1:

Johnson discloses a method of producing a battery wherein the method commences with a substrate 11 upon which the layers of battery components are built upon; the substrate is then remove and replaced with a cathode current collector (Abstract/Col 3, lines 24-45). Johnson teaches that a cathode made of a lithium intercalation compound or lithium metal oxide LiM_xO_y where M is a metal and O denotes oxygen such as $LiCoO_2$ $LiMgO_2$ or $LiNiO_2$ or $LiFeO_2$ (COL 2, lines 9-15). *Thus, Johnson refers to mixed metal oxides which are compounds formally derived from an individual metal oxides but contain two or more metal species often in arbitrary ratio.*

Johnson discloses and claims the following (COL 1, lines 43-47/ CLAIMS 1 and 8):

> In a preferred form of the invention a method of producing a method of producing a thin film battery cell comprises the steps of providing a supporting substrate, depositing a cathode upon the substrate, depositing an electrolyte upon the cathode, and removing the substrate from the cathode.

> 1. A method of producing a portion of a thin film battery cell comprising the steps of:
> (a) providing a supporting substrate;
> (b) depositing a cathode upon the substrate;
> (c) depositing an electrolyte upon the cathode; and
> (d) removing the substrate from the cathode.

> 8. A method of producing a portion of a thin film battery cell comprising the steps of:
> (a) providing a substrate made of a sputterable material;
> (b) depositing a cathode upon the substrate; and
> (c) sputtering the substrate so as to substantially remove the substrate from the cathode.

Examiner's note: *the instant claims fail to further specify whether the term "cathode mixture" stands for a physical mixture wherein the substances are mixed but not chemically*

combined and may be separated mechanically. Consequently, the present claim language has been construed as encompassing either: i) a physical mixture, or ii) a cathode mixture comprising any mixed metal oxides representing compounds which are formally derived from individual slurry metal oxides but contain two or more metal species often in arbitrary ratio, are chemical reaction products generally formed by heating mixture of appropriate oxides and are not physical mixtures but are true examples of chemical mixtures i.e. chemical compounds of arbitrary ratio.

As to claims 3-4:

Johnson disclose that the substrate can be either a metal or polymeric material (COL 3, lines 24-25/COL 5, lines 25-28):

compounds. It should also be understood that other materials may be utilized for the web substrate such as nickel, copper, nickel-copper compounds, other metals and some polymers, such as polyethylene. Furthermore, it should also be under-

As to claims 9-10:

It is disclosed that as the web continues about the aligning drum 62 the web passes below the cathode current collector mask 68 and adjacent the cathode current collector sputtering device, so that the cathode current collector device 67 deposits a very thin cathode current collector 18 thereon (COL 4, lines 54-62). It is further discloses that the web may be wound upon the aligning drum 62 in such a manner so that complete battery cells are stacked in alignment one upon the other (COL 4, lines 63-67). *Thus, the layers are stacked one upon another, at least, under certain degree of pressure.*

As to claim 11:

It is disclosed that the a protective coating may then be deposited upon the current collector to allow later stacking of the battery (COL 4, lines 35-39). *Thus, the protective coating assists to bind together the stackable components.*

As to claims 14-15:

Johnson teaches that the process of depositing cathode materials continues until substantially the entire substrate web is coated (COL 3, lines 43-46). Johnson further discloses that the process is continuously carried out (COL 3, lines 46 to COL 4, lines 62). *Thus, the steps of forming the layer and removing the substrate are continuous.*

Johnson discloses a method of producing an electrode battery as discussed above. However, the preceding prior art fails to expressly teach the cathode mixture components.

As to claims 52-61:

Hamamoto et al disclose that cathode can be prepared by mixing the cathode active material with a conducting agent, a binder such as polyvinylidene fluoride (PVDF), polytetrafluoroethylene (PTFE), and N-methylpyrrolidone solvent to form a cathode paste which is coated on a collector (*the substrate*) (SECTION 0043, 0044, 0062). **EXAMPLE 1** exemplifies mixing such specific electrode components to form the cathode paste (EXAMPLE 1).

[0043] The cathode can be prepared by mixing the cathode active material with a conductive agent such as acetylene black or carbon black, a binder such as polyvinylidene fluoride (PVDF), polytetrafluoroethylene (PTFE), and N-methylpyrrolidone solvent to form a cathode paste, then coating this cathode paste on a collector such as aluminum foil or a stainless steel lath, drying at 50 to 250° C., followed by compression molding.

[0062] 80% by weight of $LiCoO_2$ (cathode active material), 10% by weight of acetylene black (conductive agent), and 10% by weight of polyvinylidene fluoride (binder) were mixed and diluted by N-methylpyrrolidone to prepare a cathode paste. The paste was coated on an aluminum foil

In view of the above, it would have been obvious to one skilled in the art at the time the invention was made to employ the specific cathode mixture components of Hamamoto et al to make the battery electrode of Johnson because Hamamoto et al teach that battery cathodes can be prepared by mixing together the cathode active material, conducting aids, solvents and binders. Accordingly, such specific cathode mixture materials are suitable battery electrode components helping to provide a non-aqueous electrolyte battery having satisfactory electric capacity and superior cycle characteristics and storage characteristics.

Response to Arguments

12. Applicant's arguments filed 08/24/05 have been fully considered but they are not persuasive.

13. The principal contention of applicant's arguments is based on the assertion that there exists no motivation to combine the references in either way (*i.e. a) Johnson in view f Fukumura, or b) Fukumura in view of Johnson, c) or Johnson in view of Hamamoto*). In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally

available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

As for the use of Fukumura as the secondary reference, the examiner simply points out that the Fukumura reference has been cited infra to merely demonstrate and show that cathode slurry mixed materials can be used to coat electrode substrates. Applicant's analysis that the coating solution of Fukumura contains no active material is in error. In this regard, it is noted that Fukumura et al explicitly disclose that coated layers may contain an active material itself or no active material at all (See Fukumura et al, COL 4, lines 15-23). Moreover, **Example Positive Electrode 1** at column 6, lines 34-45 also clearly shows that active material, binders and solvents are mixed to provide a slurry of a coating solution for a positive electrode material. Thus, applicant's arguments that the slurry of Fukumura et al contains no active material are inapposite and misleading. Applicant is respectfully requested to carefully and thoroughly read the aforementioned sections of the Fukumura et al reference.

As far as Johnson being applied as the secondary reference, applicant has contended that "*Johnson et al does not teach that the removal of the current collector is in way desirable*" and "*One of skill in the art would not have been motivated to remove the current collector of the Fukumura electrode sheet*". However, applicant's arguments are not understood by the examiner and are out of the scope of the presently claimed invention. There is nothing in the present claim language directed to current collectors, as such, what do current collectors of Johnson et al and/or Fukumura et al have to do with the scope of the present invention? Nevertheless, the examiner likes to furnish the applicant the following information: test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of

the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art (←***Emphasis added***). See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

14. In response to applicant's argument about "*a minimal volume of inactive material*" and/or "*the increase in volume of inactive materials*", the fact that applicant has recognized another advantage/disadvantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

15. In response to applicant's arguments that "*there is nothing in either Johnson or Fukumura to suggest that such sputter deposition can successfully be employed using a slurry target rather than a solid target, and the Examiner has presented no alternative factual support for the proposition that sputtering a slurry is feasible*", the examiner likes to counter-argue substantially the opposite, in particular, there is also **nothing** in either Johnson or Fukumura to suggest that such sputter deposition **cannot** successfully be employed using a slurry target rather than a solid target, and applicant or his legal representative has presented no alternative factual support for the proposition that sputtering a slurry **is not** feasible. Currently, there is no sound or factual evidence to either believe or disbelieve, credit or discredit, that the step of sputtering a slurry is feasible or not. Thus, since PTO, and obviously the Examiner in charge of prosecuting the instant application, does not have proper equipment or instruments to carry out the analytical test or experiments, the burden is shifted to applicant to supply objective or factual evidence demonstrating why sputtering a slurry is not feasible.

By the way, the examiner also asserts that it is not enough that applicant's representative personally believes that sputtering a slurry is not feasible. That is to say, the arguments of counsel cannot take the place of evidence in the record. An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of inherent anticipation/obviousness (See ***MPEP 716.01 and 2145: Consideration of Applicant's Rebuttal Arguments***).

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Alejandro whose telephone number is (571) 272-1282. The examiner can normally be reached on Monday-Thursday (8:00 am - 6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Raymond Alejandro
Primary Examiner
Art Unit 1745

RAYMOND ALEJANDRO
PRIMARY EXAMINER